

Marker Text

Here on July 4, 1894, Elwood Haynes made the first test run of an automobile which he designed and built. His car reached a speed of about seven miles per hour over a six mile course on the Pumpkinvine Pike.

Report

Secondary sources and reminiscences confirm the marker text; however, few primary accounts exist and biographer Ralph D. Gray posits that records for Haynes' businesses, including Haynes Automobile, Haynes Stellite and American Stainless Steel, have been destroyed. Therefore, the following review is predicated mostly on secondary sources, Haynes' reminiscences, and trade journals and newspaper articles published in the early 1900's and 1920's in recollection of the test run. This review briefly addresses debate about the inventor of America's first car, provides biographical information about Haynes, and elucidates the importance of the test run.

Elwood Haynes was born October 14, 1857 in Portland, Indiana.¹ Unlike many inventors and employees in the automobile industry, Haynes was well-educated, attending the Worchester Polytechnic Institute in Worchester, MA, where he wrote his thesis "The Effect of Tungsten on Iron and Steel," which would inform his endeavors with automobiles and alloys.² Haynes then attended Johns Hopkins University for post-graduate courses in organic chemistry.³ After completing his education, Haynes took advantage of the revolutionary discovery of natural gas in Portland in 1886 and became Manager of the Portland Natural Gas and Oil Company.⁴ In 1890, he became the Field Superintendent of the Indiana Natural Gas Company located in Chicago, with headquarters in Greentown, Indiana.⁵

According to Haynes, traveling to oversee natural gas projects inspired him to develop a horseless carriage. Haynes told W.A.P. John that he conceived of the idea for the vehicle as early as 1887, while traversing "crude roads in the most inclement weather" in his role as field superintendent. He recalls in his *The Complete Motorist*:

The great trouble with the horse was his lack of endurance, and this became more apparent day after day ... One afternoon, or night, rather, while driving home after a hard day's work, I thought to myself that it would be a fine thing if I didn't have to depend on the horse for locomotion. From then on my mind dwelt on a great deal upon the subject of a self-propelled vehicle, that could be used on any country road or city street.⁷

Haynes pursued his idea when he moved to Kokomo in 1892 and shortly thereafter purchased a Sintz 2-cycle gasoline engine. He chose a gasoline engine, rather than a steam-powered one, because he "did not consider it advisable to have an open fire burning in a vehicle." Similarly, he avoided an electric engine because batteries were "too heavy and too limited." While Haynes set up the gas engine in his kitchen and built it "up in the form of a small truck," he hired brothers Edgar and Elmer Apperson to construct the carriage based on his designs at their Riverside Machine shop. ¹¹



According to John D. Barnhart and Donald F. Carmony, the "fundamental knowledge needed to build an automobile had been gained by the 1890's," but required considerable experimentation before the automobile industry would emerge. ¹² Barnhart and Carmony assert that in the 1890's "many mechanics and others made various types of the horseless carriage, including cars operated by electric, steam, and gasoline engines." ¹³ Haynes publicly debuted his vehicle, dubbed the "Pioneer," during Kokomo's 1894 Fourth of July celebration, which featured a veterans' encampment, parade and bicycle races. ¹⁴ Concerned that the sound of the engine might upset horses pulling carriages, Haynes and his men towed the automobile via carriage from the festivities to the countryside. ¹⁵ Haynes remembered:

It moved off at once at a speed of about seven miles per hour, and was driven about one and one-half miles farther into the country. It was then turned about, and ran all the way into the city without making a single stop. . . . At that time the bicycle was very popular as a pastime, especially among the young ladies. I remember as the little machine made its way along the streets we were met by a 'bevy' of girls mounted on wheels . . . I shall never forget the expression on their faces as they wheeled aside, separating like a flock of swans and gazing wonder-eyed at the uncouth and utterly unexpected little machine. ¹⁶

The marker text correctly identifies Pumpkinvine Pike as the location of the test run, although minor variations of the name exist. ¹⁷ Author William H. Rankin <u>elaborates</u> that the car was "drawn by a team of horses to the Pumpkinvine Pike on the south bank of Wildcat Creek, near the place where stood the machine and the blacksmith shop." ¹⁸ Haynes' evaluation of the significance of the test run fluctuated, as he claimed around 1913 or 1914 "frankly, I did not realize on that Fourth of July when I took the first ride in America's First Car, that a score of years later every street and highway in America would echo the sound of the horn and the report of the exhaust." ¹⁹ However, he stated in 1925 that the drive convinced him "of the future of the auto and [he] immediately began plans for that factory that was later known as the Haynes Automobile Company. This was the beginning of the industry that has revolutionized transportation throughout the world."

Haynes attempted to capitalize on his invention by partnering with Elmer Apperson in 1895, creating the Haynes Automobile Company to build and sell automobiles.²¹ In 1898, the firm was formally incorporated as the Haynes-Apperson Company until 1901, when Elmer Apperson left to establish an automobile company with his brother.²² Haynes continued operations and, according to *The Horseless Age*, the company's new factory was "one of the best equipped plants for the manufacture of automobiles in the country."²³

Throughout his time working with automobiles, Haynes's devoted himself to working with alloys and superalloys, creating, most notably, Stellite.²⁴ He obtained a patent for the alloy in 1912 and produced it commercially with the <u>Haynes Stellite Company</u>.²⁵ The "unsung hero and workhorse of metallurgy," Stellite was an ideal alloy for <u>cutting tools</u>, tractors, jet aircraft and disks due to its "inherent excellent physical, chemical, and mechanical properties" that made it <u>resistant</u> to high heat and corrosion.²⁶ According to Gray, Stellite proved so durable that it was used to produce the majority of shells and shrapnel employed in World War I, as well as scalpels used in war hospitals.²⁷ Additionally, the



alloy was used in engine turbine blades of World War II bombers, as well as jet engine blades in the Korean War.²⁸

Haynes struggled to overcome consumer resistance to his novel invention. The automobile's accessibility and convenience was not immediately evident to consumers, as Rankin speculated "there must have been very few men who deemed themselves capable of acquiring enough mechanical knowledge to run even a sewing-machine; to steer a gasoline-propelled vehicle; to start the engine . . . to understand what a cylinder meant, or a spark plug or a carburetor—all this was Greek to the average citizen." Compounding the problem, were questions about the legality of driving automobiles on the same road as horses. Haynes recalled that he kept in his pocket the "'decision given by the Supreme County judge which declared the road was open to all types of vehicles used for transportation."

Polemical discussions continue about the inventor of America's first car and whether or not Haynes deserves the title. Despite branding his 1912 automobiles with a hood ornament that read "Haynes: America's First Car," to remind the "public of the historical significance of their product," Charles Duryea and, later, the Apperson brothers challenged Haynes' claim. Barnhart and Carmony assert that Duryea constructed his first car in 1892, followed by Henry Ford in 1893 and Haynes in 1894. Lack of official documentation about when these inventors conceived of their ideas and built their automobiles prohibits definitive statements about who invented the first automobile, "despite Ralph D. Gray's best efforts." Numerous titles have been assigned to Haynes to circumvent the "first inventor" debate. President of Stutz Motor Car Company, Frederick E. Moskovics, deemed Haynes the "first builder of the practical automobile," distinguishing that Haynes' car was the first to be widely used by the public, if not the first in existence. An advertisement for the 1922 commemoration of the test run refers to Haynes as builder of "America's first mechanically successful automobile."

Although Haynes may not have invented the first car, his company contributed to a major industrial and transportation revolution and helped position the vehicle as a popular form of transit. Rankin boasts that the automobile's "speed and convenience did away forever with those isolated communities which, too small to be touched by the railways, were, in effect, shut off from the outside world." Haynes viewed its significance similarly, stating "it is a help in entertaining; it is a time-saver in the ordinary affairs of every day—it brings 'down-town' or 'the folks on the farm' or 'Cousin John' or 'Will's folks' into practically a next-door relationship." His automobile company also had an impact at the community level, as Ralph Gray states that "industrial activity connected with the automobile greatly augmented Kokomo's importance as a manufacturing center, an importance which has continued despite the demise of the automobile companies." He elaborates that Haynes' company served as "Kokomo's largest manufacturing enterprise, and between four hundred and five hundred persons were employed, receiving an annual payroll in excess of \$200,000."

As with <u>many inventors and innovators</u>, Haynes struggled to convert his visionary ideas into an enduring and profitable endeavor. Haynes' business suffered from the post-World War I economic depression of 1920 and 1921, which profoundly impacted the national automobile industry. ⁴⁰ In addition



to being a victim of circumstance, Haynes ignored public demand for small, mass marketed cars and instead focused on medium sized luxury cars intended for affluent customers. Eventually Haynes could not compete with Ford's mass production and marketing, which gained Ford a "loyal and growing clientele," and Haynes declared bankruptcy October 1924. Haynes hinted at the struggles that would lead to the company's 1925 closing, lamenting that being a pioneer of the automobile industry "meant a selling loss on the Haynes car, whereas to have waited until others had made the trial and experiment, and then to have followed in the easy path of their success probably would have saved us thousands of dollars."

Just months after the closing of his company, Haynes passed away from a combination of influenza and heart failure, although Ralph Gray speculates that his death and the collapse of the company were not coincidental.⁴⁴ Despite some business failings, Kokomo's "first citizen" elevated Kokomo's national profile and helped usher America into the automobile age.⁴⁵

Further Reading

According to Ralph Gray, The Elwood Haynes Collection at the Howard County Historical Museum (also known as the Howard County Historical Society) contains Haynes' correspondence, as well as a few business papers, and sheds light on Kokomo's automobile industry during the period. He states that the archives at Indiana University, Kokomo contain some related photographs and manuscripts. Gray also states that reporters in Portland, Greentown and Kokomo, Indiana frequently reported on Haynes' activities. He suggests researchers consult the Detroit Public Library for 1890's trade journals.

For biographical timelines about Haynes, see "Condensed Biography of Elwood Haynes," *Indianapolis Star*, April 14, 1925, Indiana State Library (ISL) Clippings File, Biography; and "Life and Inventions of Elwood Haynes," *The Haynes Pioneer* (April 13, 1925), ISL Clippings File, Biography; and W. Spencer Huffman, Eos Petty Richardson and Mary Cedars, "Elwood Haynes, 1857-1925," (Howard County Historical Society, Kokomo, Indiana, n.d.), ISL Clippings File, Biography.

Haynes' *The Complete Motorist* provides information about his company and automobiles, and serves as both a reminiscence and marketing device.



For a detailed account of Haynes designing and constructing the Pioneer, see the *Sworn Statement of Elwood Haynes*.

¹² John D. Barnhart and Donald F. Carmony, *Indiana: From Frontier to Industrial Commonwealth*, vol. 2 (New York: Lewis Historical Publishing Company, 1954. Reprint. Indiana Historical Bureau, 1979): 470.

¹ "Elwood P. Haynes," Find A Grave, accessed <u>findagrave.com</u>.

² W. Spencer Huffman, Eos Petty Richardson and Mary Cedars, "Elwood Haynes, 1857-1925," (Howard County Historical Society, Kokomo, Indiana, n.d.): 5, Indiana State Library (ISL) Clippings File, Biography; Elwood Haynes, *The Complete Motorist* (Haynes Automobile Company, c. 1913-1914): 7. *The Complete Motorist* is a promotional book that includes a brief history of the Haynes Automobile Company.

³ "Elwood Haynes, 1857-1925," 5.

⁴ "Declared Off: The Proposed Celebration of the Natural Gas Discovery," *Logansport Pharos Tribune*, July 22, 1896 (accessed Newspaper Archive); "Elwood Haynes, 1857-1925," 6; *Alloys and Automobiles*, 4, 39-42.

⁵ "Elwood Haynes, 1857-1925," 6; "Declared Off: The Proposed Celebration of the Natural Gas Discovery."

⁶ W.A.P. John, "History to Repeat Itself July 4th, in Kokomo," in *The Eyes of the World Will Turn to Kokomo*, n.p., ISL Manuscripts and Rare Books, Haynes Automobile Company Records, July 1922, Folder 1 of 1.

⁷ The Complete Motorist, 8.

⁸ Sworn Statement of Elwood Haynes (Kokomo, Ind., Haynes Automobile Co., ca. 1920): [2]), Iowa State University Library; *The Complete Motorist*, 8.

⁹ Sworn Statement of Elwood Haynes, [2].

¹⁰ "First Work on Auto Started in Kitchen of Kokomo Home," *Indianapolis News*, April 14, 1925, ISL Clippings File, Biography.

¹¹ For built "up in the form of a small truck," see *The Complete Motorist*, 9; *Sworn Statement of Elwood Haynes*, [2]; "First Work on Auto Started in Kitchen of Kokomo Home"; For the Apperson brothers' role, see "Elwood Haynes, 1857-1925," 7.

¹³ Ibid.

¹⁴ Chapter 6 of *Alloys and Automobiles* describes the Fourth of July celebration and test run in great detail; "First Work on Auto Started in Kitchen of Kokomo Home"; *The Complete Motorist*, 10.



The Pioneer is currently on display at the Smithsonian Museum.

Billy Adrian, who helped construct the Pioneer, provides one of the only contradictory accounts of the date of the test run, claiming "I hardly think it was the Fourth of July when he had a team haul his car out to the Pumpkin Vine pike. It seems to me we were working that day, and I don't think we would have worked on the Fourth." Adrian's memory may simply have been incorrect, as significant time elapsed between the test run and his recollection (Mark Ogden, "Forty Years Have Passed Since Haynes Gave the 'Horseless Carriage' Test Spin," *Indianapolis Star*, July 1, 1935, n.d., ISL Clippings Files, Biography).

¹⁵ "Looks Back Twenty Years: Pioneer of Automobile Industry Does a Little Reminiscing," *New York Times*, August 3, 1913, 8 (accessed ProQuest, March 10, 2014); *The Complete Motorist*, 10.

¹⁷ "Elwood Haynes, 1857-1925," 7; William H. Rankin, "<u>Birth of America's First Automobile</u>," *Advertising and Selling* 32 (1922): 19 (accessed Google Books).

The site of the test run has been referred to, although infrequently, as "Pumpkin Vine Pike" (Rick Johnson, "Elwood Haynes: Inventive Genius Who Lacked the Tycoon's Instinct," *Indianapolis Star Magazine*, August 17, 1975, 14, ISL Clippings File, Biography).

¹⁶ The Complete Motorist, 10.

¹⁸ "Birth of America's First Automobile," 19.

¹⁹ The Complete Motorist, 14.

²⁰ "First Work on Auto Started in Kitchen of Kokomo Home."

²¹ Ogden, "Forty Years," n.p.; "History to Repeat Itself July 4th, in Kokomo"; *Alloys and Automobiles*, 83.

²² Ralph Gray, "Gas Buggy Revisited: A 'Lost' Novel of Kokomo, Indiana" *Indiana Magazine of History* 70, no. 1 (March, 1974): 28; "Kokomo, the Birthplace of America's First Car," in *The Eyes of the World Will Turn to Kokomo*, n.p., ISL Manuscripts and Rare Books, Haynes Automobile Company Records, July 1922, Folder 1 of 1.

²³ "The New Haynes-Apperson Factory," *The Horseless Age* 2, no. 2 (January 14, 1903): 110, accessed archive.org.

²⁴ The Complete Motorist, 13; "Haynes & Apperson's New Model," 18; Elwood Haynes, "Tests Made With 'Stellite' Tools," Machinery (April 1913): 629, accessed Google Books).

²⁵ Alloys and Automobiles, 117-127.



²⁶ J.J. Phillips, Patents Engineer, Stellite Division, Union Carbide Corporation, Kokomo, Indiana, "Elwood Haynes Contribution to Metallurgy," in "Elwood Haynes, 1857-1925," 11; See Chapters 9 and 10 of *Alloys and Automobiles* for Haynes' experimentation with Stellite and business ventures involving the alloy, including its frequent use in World War I.

²⁷ Allovs and Automobiles. 134-135.

²⁸ "Elwood Haynes: Inventive Genius Who Lacked the Tycoon's Instinct," 9.

²⁹ "Birth of America's First Automobile," 26.

³⁰ Alloys and Automobiles, 101.

³¹ For quoted passages, see *Alloys and Automobiles*, 171.

³² Indiana: From Frontier to Industrial Commonwealth, 470.

³³ For Gray's efforts, see James D. Norris, Review of *Alloys and Automobiles: The Life of Elwood Haynes* by Ralph D. Gray, *Indiana Magazine of History* 76, no. 1 (March 1980): 61.

³⁴ "Local Men Pay Tributes to Memory of Elwood Haynes," *Indianapolis Star*, April 14, 1925, ISL Clippings File, Biography.

³⁵ "Kokomo, the Birthplace of America's First Car," in *The Eyes of the World Will Turn to Kokomo*, n.p., Indiana State Library Manuscripts, Haynes Automobile Company Records, July 1922, Folder 1 of 1.

³⁶ "Birth of America's First Automobile," 26.

³⁷ The Complete Motorist, 15.

^{38 &}quot;Gas Buggy Revisited," 26.

³⁹ Alloys and Automobiles, 111.

⁴⁰ Ibid., 189-190.

⁴¹ George Moore, "The 'First' Which Didn't Last," newspaper not cited, ISL Clippings Files, Automobiles, History of Companies, A-H; Norris, Review of *Alloys and Automobiles*, 62; *Alloys and Automobiles*, 169.

⁴² For "loyal and growing clientele," see *Alloys and Automobiles*, 169; For company competition and failure, see Gray, "Gas Buggy Revisited," 29; "The 'First' Which Didn't Last."

⁴³ The Complete Motorist, 77.



⁴⁴ Alloys and Automobiles, 201; Rick Johnson, "Elwood Haynes: Inventive Genius Who Lacked the Tycoon's Instinct," *Indianapolis Star Magazine*, August 17, 1975, 13, ISL Clippings File, Biography.

⁴⁵ Local publications frequently refer to Haynes as Kokomo's "first citizen" ("Elwood Haynes: Inventive Genius Who Lacked the Tycoon's Instinct"; *Alloys and Automobiles*, 203).